Release Notes

This release notes gives information about Stratix IV GX FPGA Development Kit BSP Development environment, deliverables, supported IP cores and new features and enhancement.

Development environment
Toolchain

- **Nios2-linux-gnu-gcc (GCC v4.1.2)**

Host platform

- **CentOS 5.3**

Target board

- **Stratix IV GX FPGA Development Kit (DK-DEV-4SGX230N)**

Other boards

1. Altera NEEK board
2. Terasic THDB-SUM board
3. These boards are connected as shown in Image below.Altera NEEK board's HSMC is connected to Stratix IV GX FGPA development Kit 's HSMC Port A and for USB Host controller , Terasic board's HSMC must be connected to Stratix IV GX FPGA Development Kit's HSMC Port B.

☞ Use on board Embedded USB Blaster for Target board to Host PC communication.External Blaster sometimes fails to load the .elf file from Linux Host PC.

Deliverables

1. Source **(bsp-lnx-s4gxdk-110103-0.1.0.0.tar.bz2)**
- Nios2-Linux
- Linux source

- Buildtools
- System-Board

2. Documents **(docs.zip)**

- Docs
- boot_message.txt
- User Guide (ug_bsplnx-s4gxdk_v1.1.pdf)

3. Reference Design **(ref_design.zip)**

- Ref_design
- sys_qii100sp1_linux_bsp_s4gxdb.qar

4. Quick Reference (**quick_ref.zip**)

- Quick_ref
- Prebuilt_image

Supported IP Cores

- Altera JTAG UART
- Altera UART
- Altera PIO
- Altera 10/100/1000 Ethernet MAC
- Altera LCD controller
- Altera SPI
- SLS PS2
- SLS SD Host Controller
- SLS I2C Master
- SLS USB20 Host Controller

Features

- **Kernel**
  Kernel v2.6.34
- **Drivers**
- Ethernet Driver
- PIO Drivers
- Button PIO Driver
- Altera TouchPanel Driver
- Altera LCD Driver

- • SLS PS2 Driver
- • SLS SD Host Driver
- • SLS I2C Master Driver
- • SLS USB20 Host Driver
- ■ **JFFS2 File System Support**

Bug reporting

If you find an.com.